

FIG. 1
("PRIOR ART")

REPLACEMENT SHEET

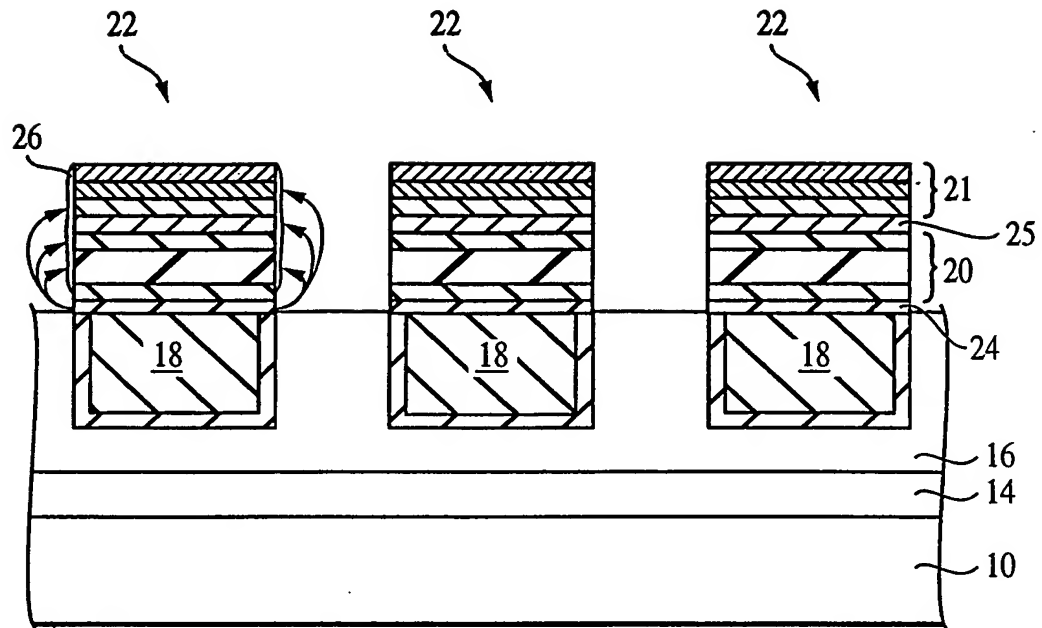


FIG. 1A
("PRIOR ART")

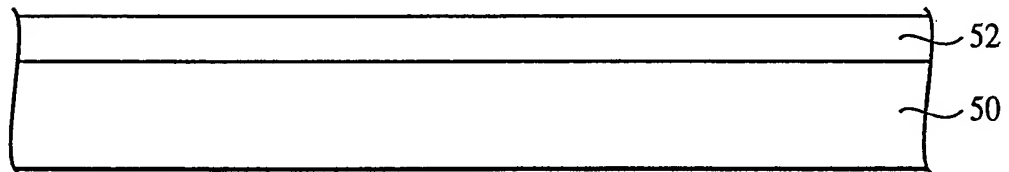


FIG. 2

REPLACEMENT SHEET

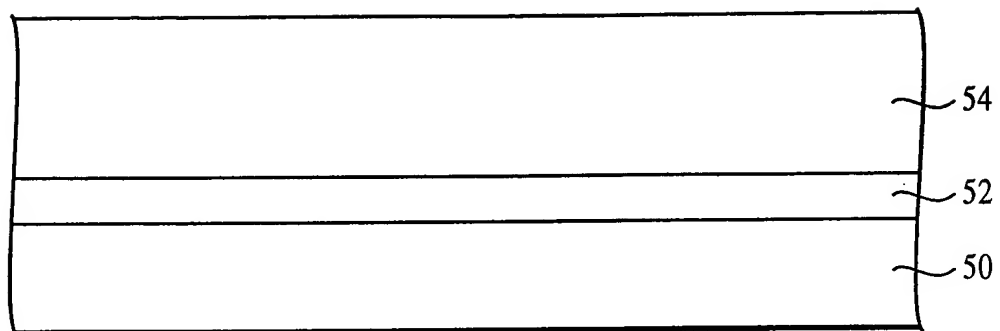


FIG. 3

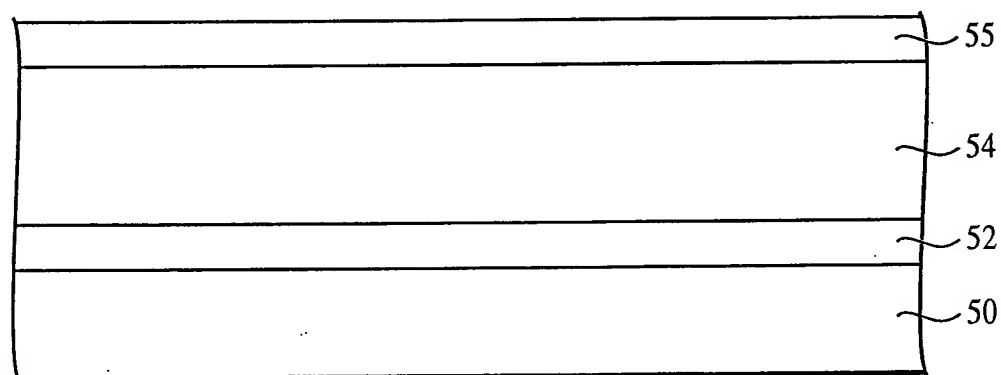


FIG. 4

REPLACEMENT SHEET

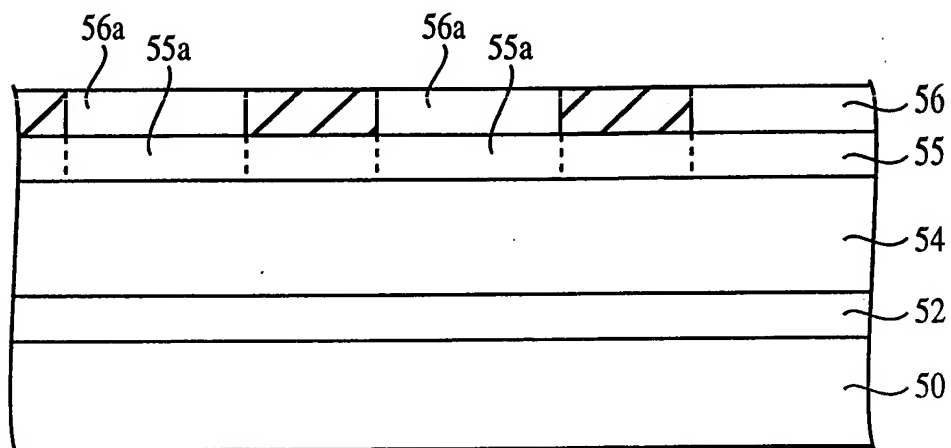


FIG. 5

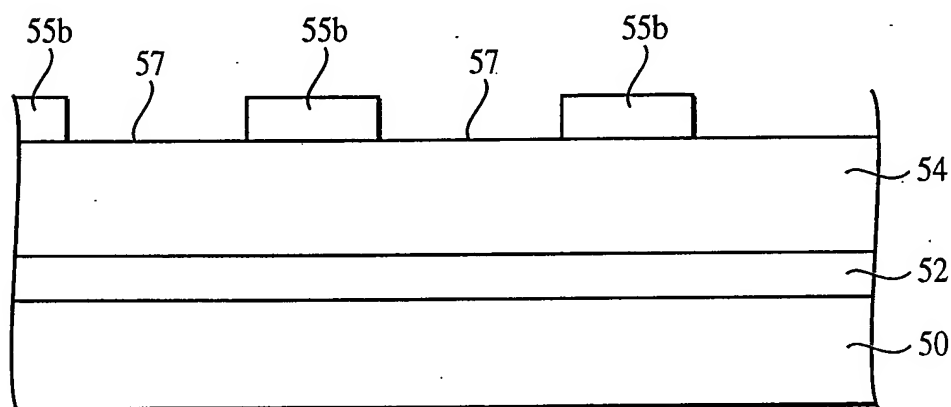


FIG. 6

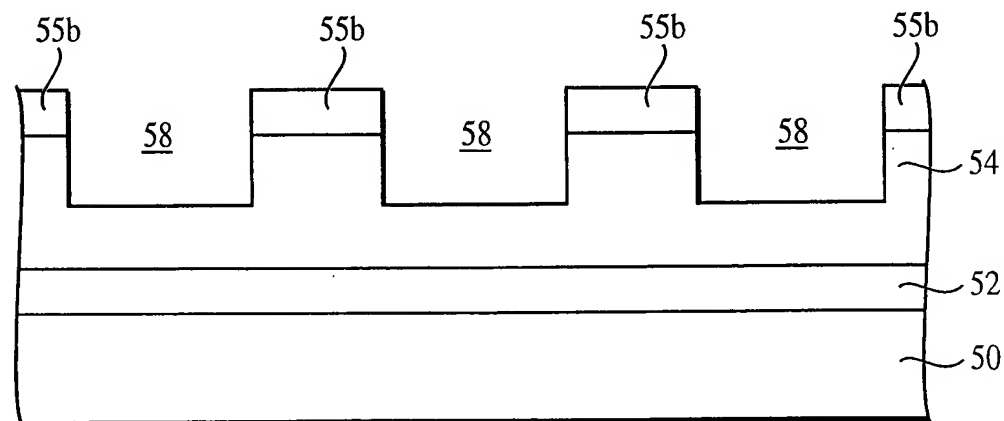


FIG. 7

REPLACEMENT SHEET

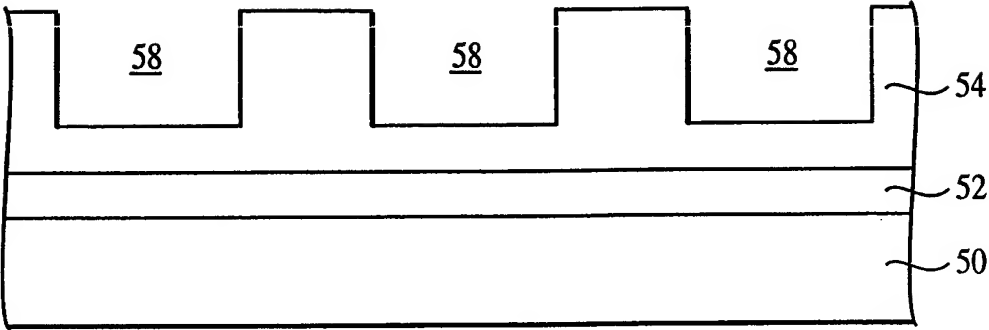


FIG. 8

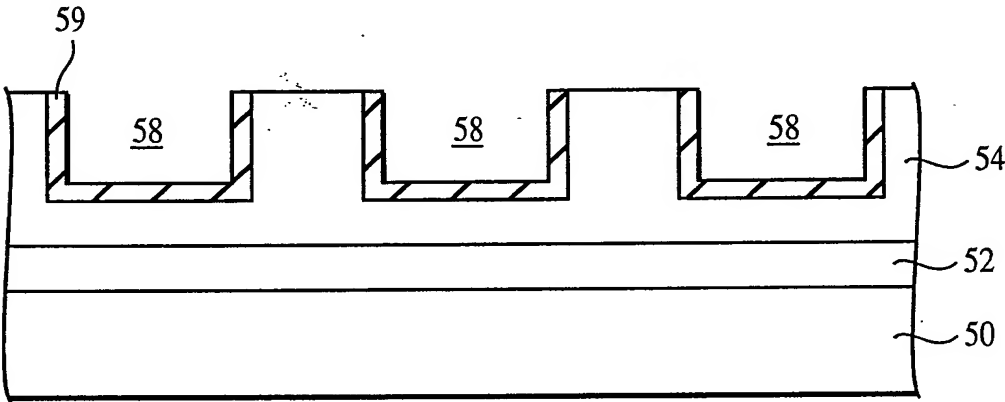


FIG. 9

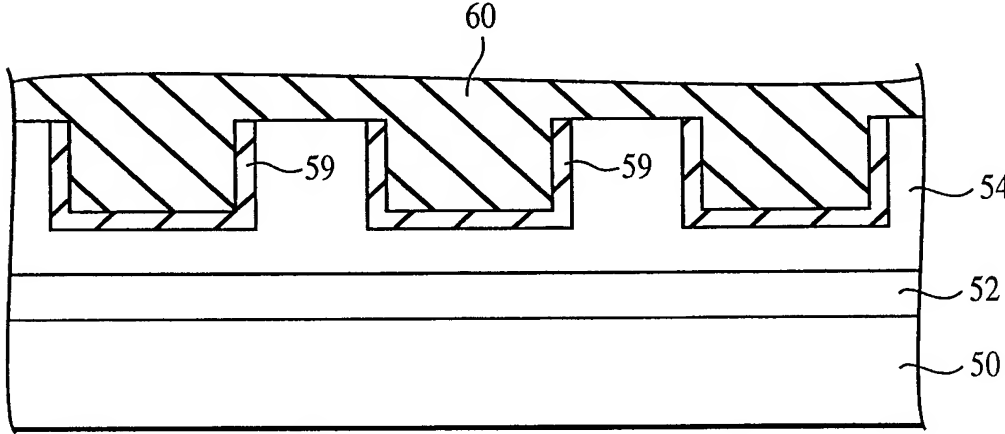


FIG. 10

REPLACEMENT SHEET

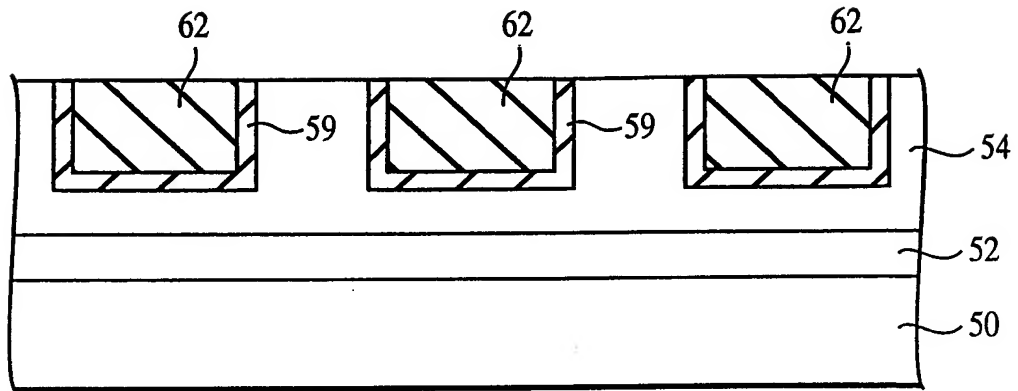


FIG. 11

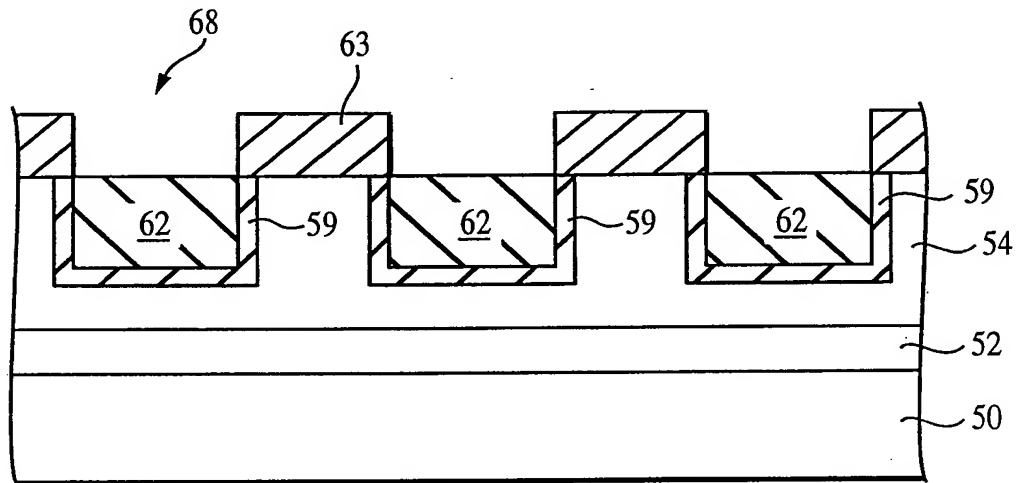


FIG. 12

This cross-sectional view shows a semiconductor device with a substrate 50 and a base layer 52. A series of rectangular blocks 59 are arranged in a row, each containing a central region 62. The blocks 59 are separated by a material 54. Above the blocks 59, there is a complex multi-layered structure 79. This structure includes a layer 63, a layer 71, a layer 73, a layer 75, and a top layer 77. The layers 71, 73, 75, and 77 are shown as thin, overlapping layers, while layer 63 is a thicker layer underlying them. The blocks 59 are also shown with a hatched pattern, indicating a different material or region.

This cross-sectional view shows a semiconductor device with a trench structure. The device consists of a substrate 50 with a layer 52 on top. A trench 54 is formed in the substrate, and a layer 59 is deposited on the trench walls. A layer 62 is deposited on the trench floor. A layer 63 is deposited on the trench walls, and a layer 80 is deposited on the trench floor. A layer 81 is deposited on the trench walls, and a layer 83 is deposited on the trench floor. A layer 85 is deposited on the trench walls, and a layer 89 is deposited on the trench floor. A layer 79 is deposited on the trench walls, and a layer 80 is deposited on the trench floor.

FIG. 14

REPLACEMENT SHEET

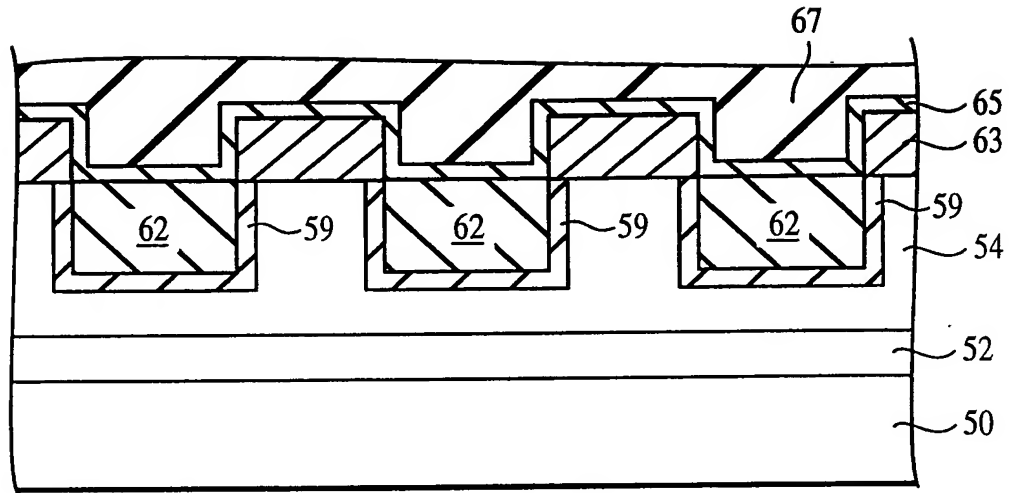


FIG. 15

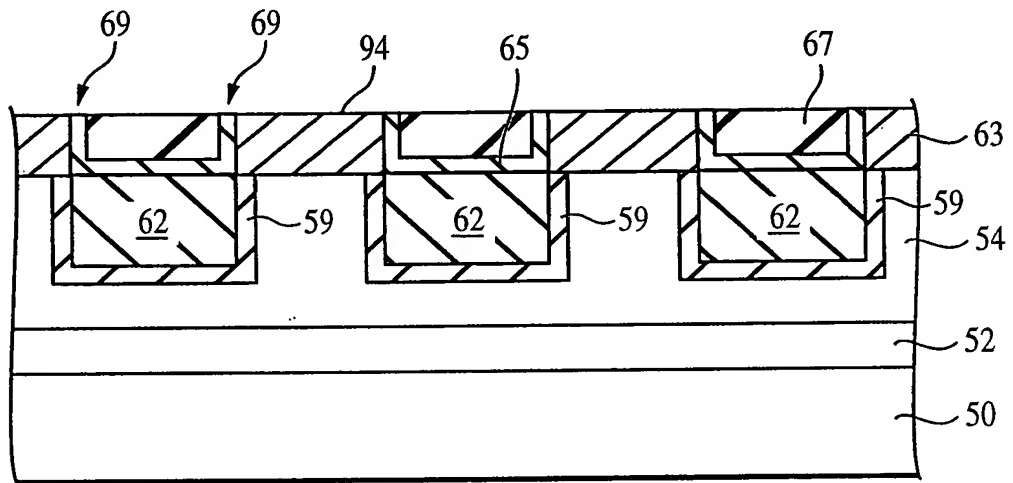


FIG. 16

REPLACEMENT SHEET

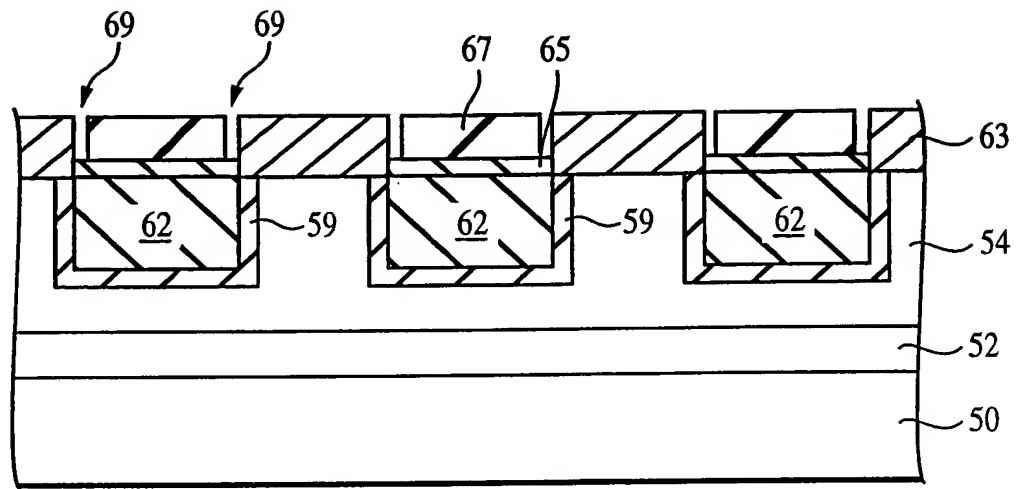


FIG. 17

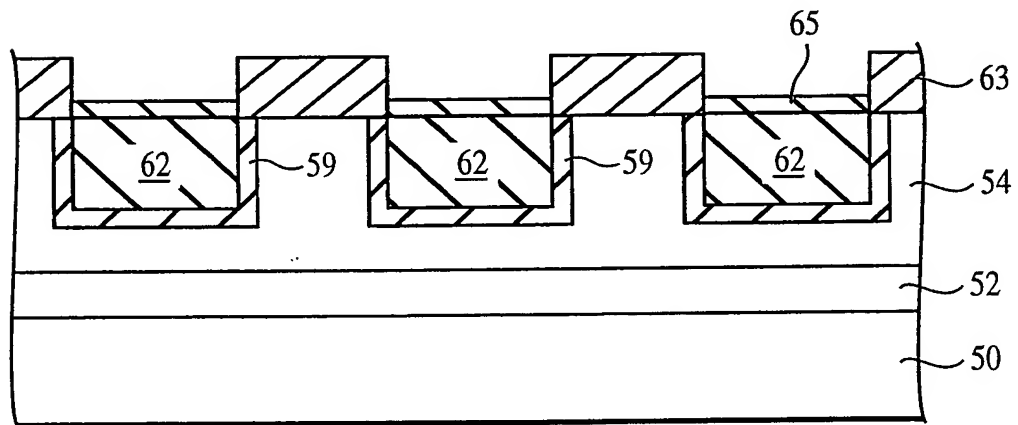


FIG. 18

REPLACEMENT SHEET

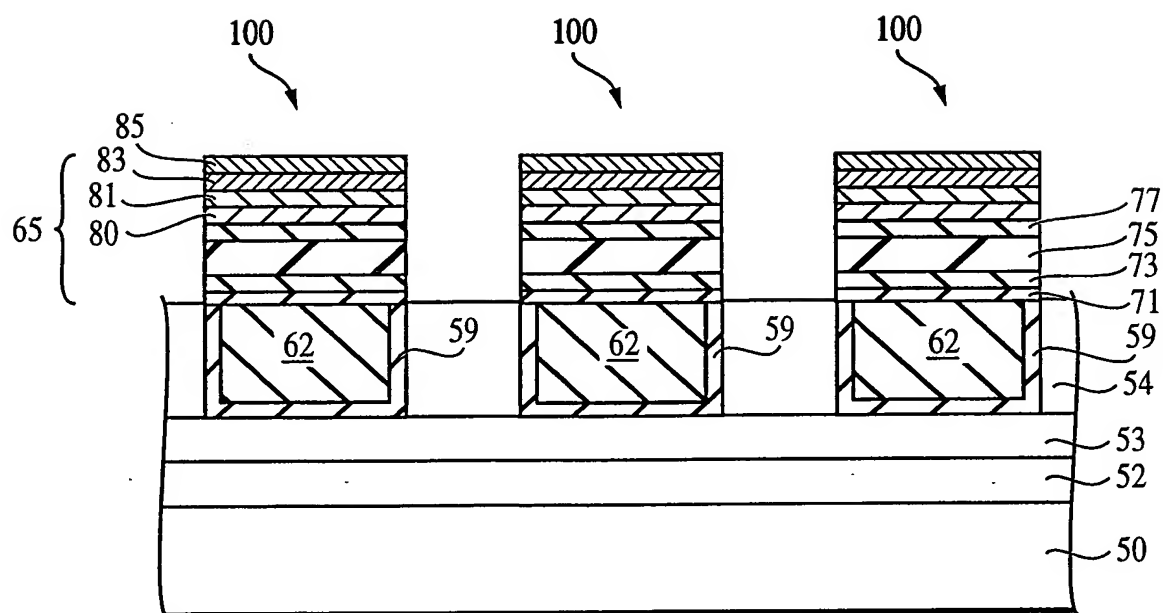


FIG. 19

REPLACEMENT SHEET

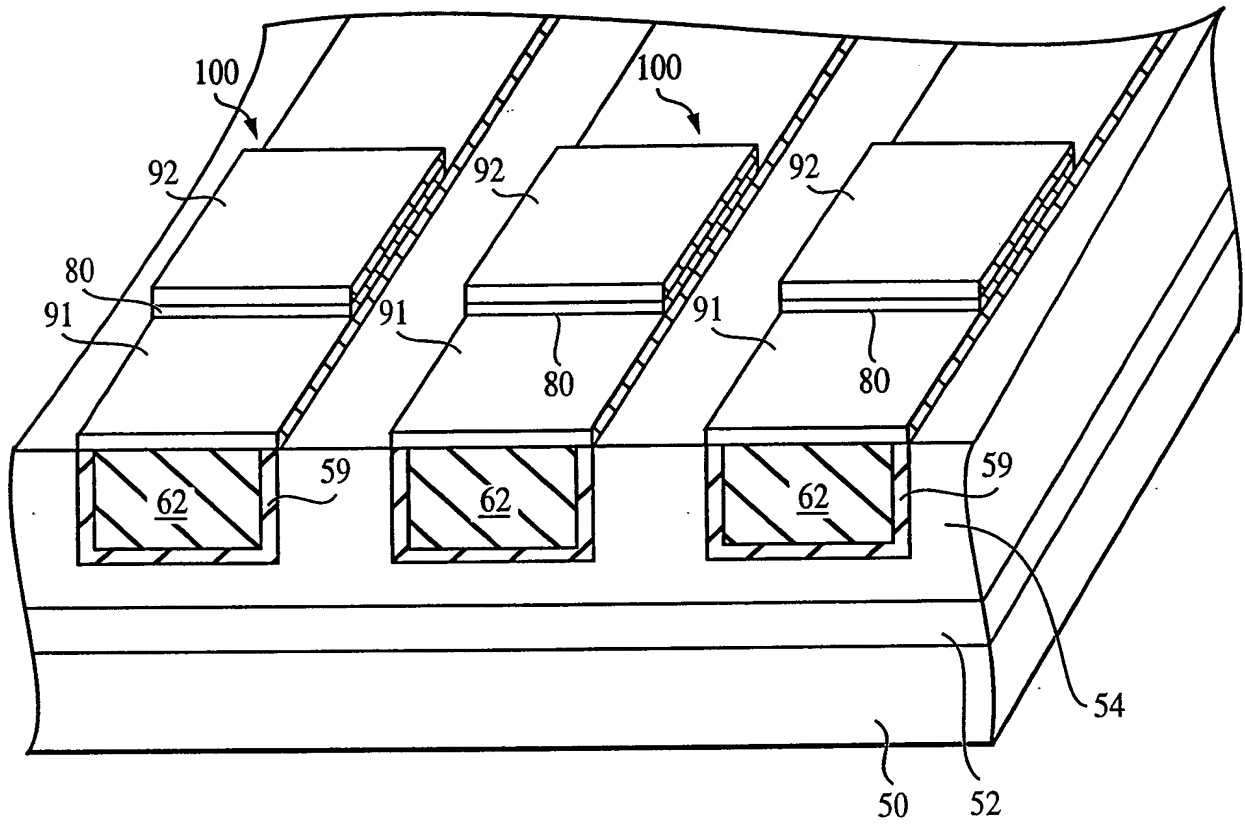


FIG. 20

FIG. 21

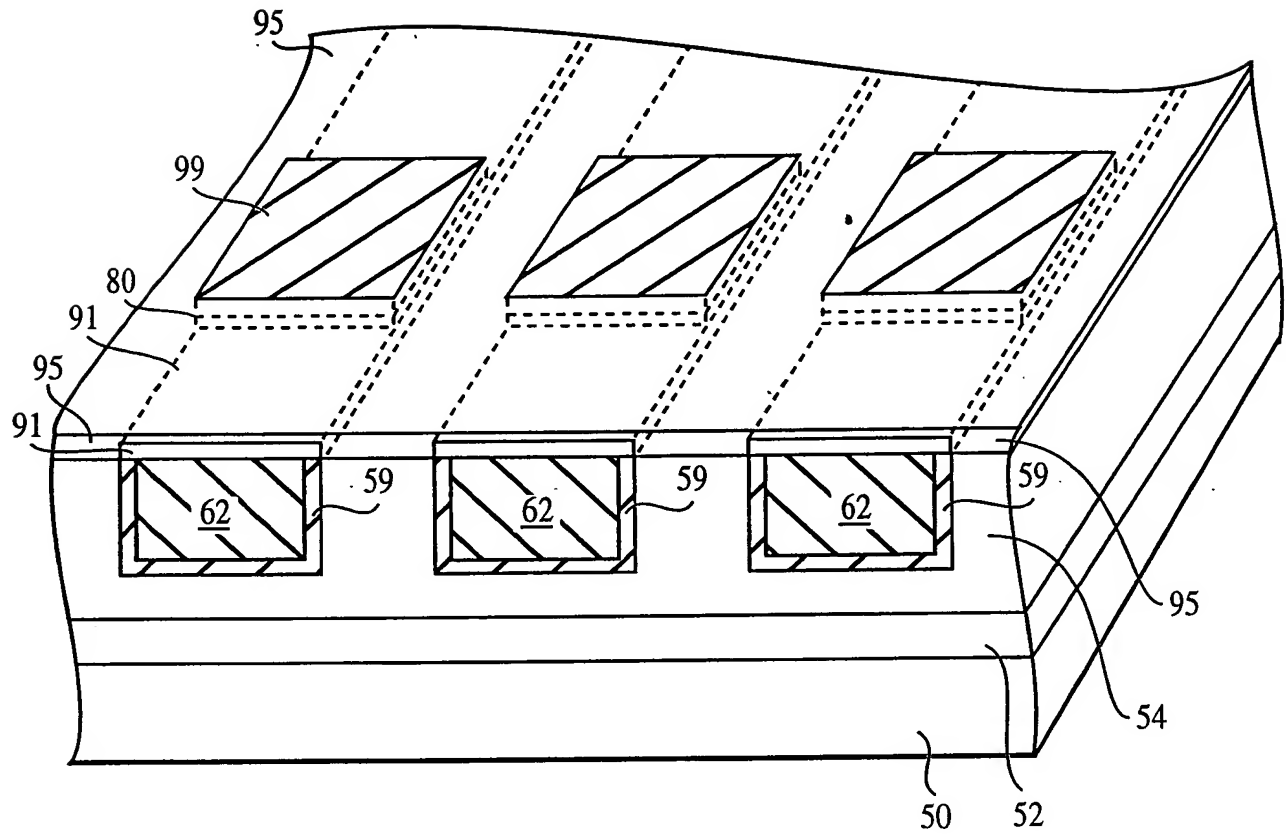


FIG. 22

REPLACEMENT SHEET

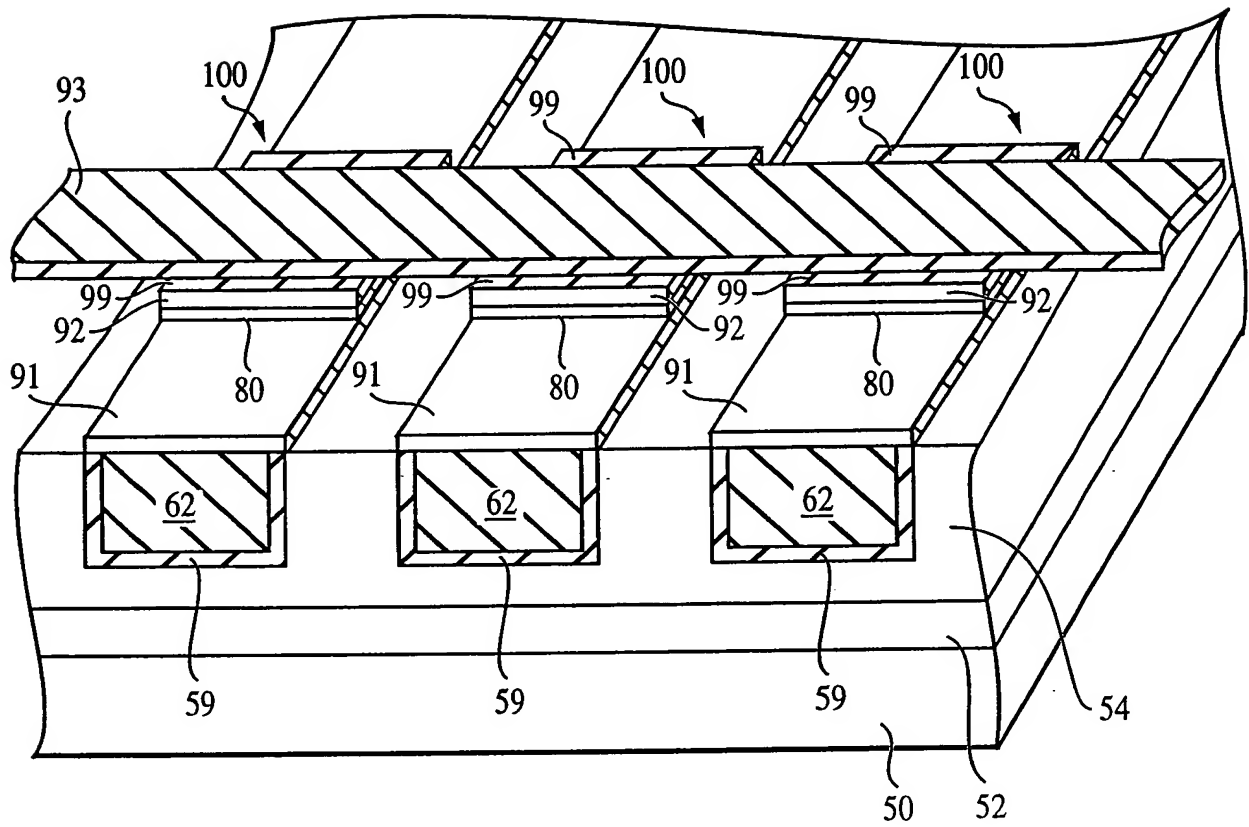


FIG. 23

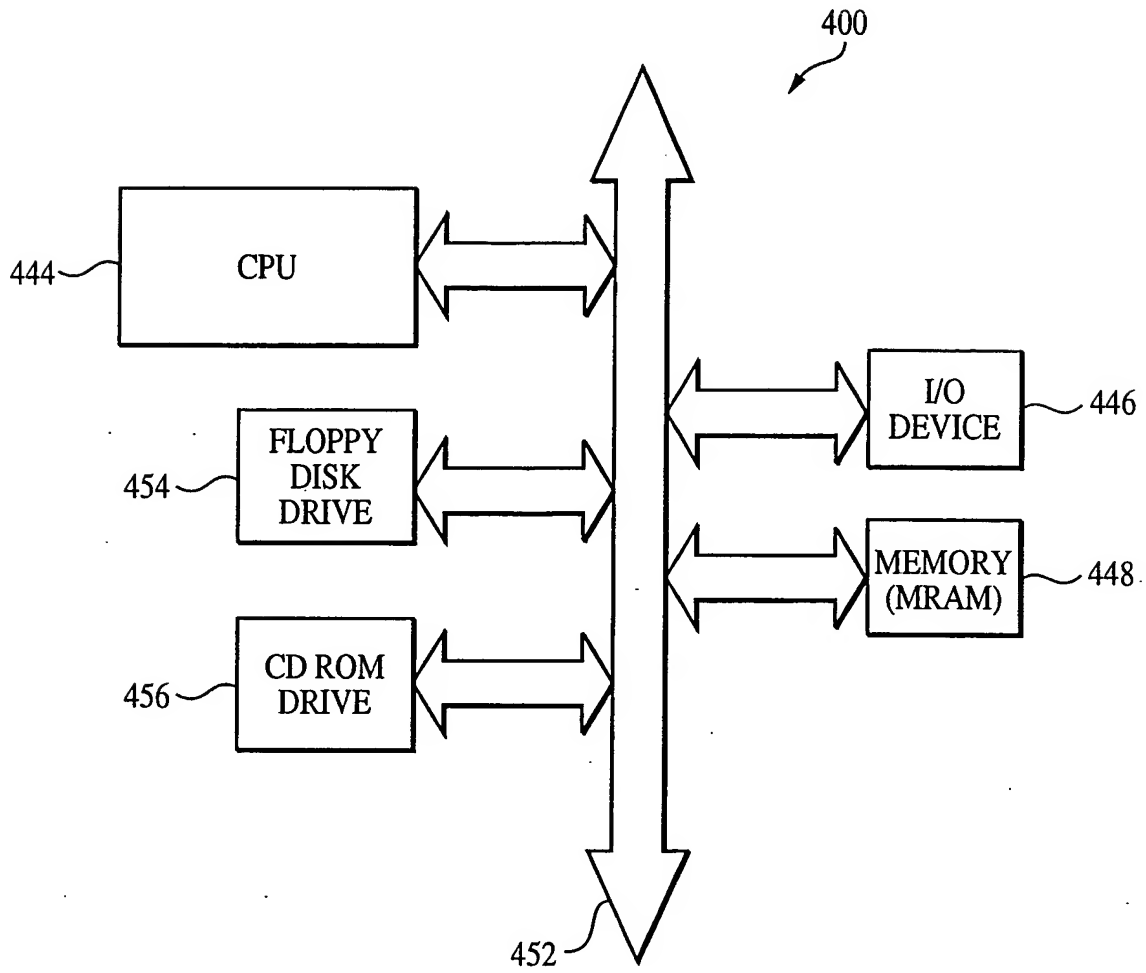


FIG. 24